Converting The Strata Building to LADM

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SUMMARY

A country profile based on LADM has been conceptualised in the last few years as part of joint research efforts between the Department of Survey and Mapping Malaysia (JUPEM) and Universiti Teknologi Malaysia (UTM). The LADM conceptual model covers various aspects of spatial data components available in the mapping agency (JUPEM), including data from Land Office e.g. land registration. The Malaysian LADM country profile covers various classes of spatial unit including strata objects classes such as MY_Building, MY_ParcelUnit, MY_AccessoryUnit, MY_CommonPropertyUnit, MY_LimitedCommonPropertyUnit and MY_LandParcel).

This paper attempts to discuss one experiment of converting the available building strata schema into LADM model. The existing strata schema was developed based on XML format. We also plan to investigate the potentials of implementing topological connections in the conversion. Database issues will be discussed and investigated since the existing framework only support 2D strata, thus a combination of 2D and 3D database schema within the LADM profile together with validation of the physical schema and evaluation of data integration (existing spatial data and RRR). The entire workflow of the experiment will be demonstrated where conversion of strata XML data collected from the field to the LADM data model, and then 3D visualization. It is anticipated that the developed conversion and integration modules could serve as an initial research towards a bigger scope of work for near-future LADM compliance model for the mapping agency and other stakeholders.